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| 10/516,859 | 12/03/2004 | Casimir Johan Crawley | PU020269 | 7325 |

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Joseph S Tripoli
Thomson Licensing Inc
PO Box 5312
Princeton, NJ 08543-5312

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| EXAMINER |
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HU, RUI MENG

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2618

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05/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/516,859 | Applicant(s) CRAWLEY, CASIMIR JOHAN | |
| | Examiner RuiMeng Hu | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1, 2, 5, 6, 12, 13, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** in view of **Hayashi et al. (US Patent 6075829)**.

Consider **claim 1**, Sakamoto disclose apparatus comprising: a receiver (figure 4, PLL 16, column 3 line 58-column 4 line 10, column 7 lines 18-61) for receiving an signal; a decoder (figure 4, QPSK demodulator 14 and PCM decoder 20) for

demodulating said signal; and a processor (figure 4, column 3 lines 65-68, a detection circuit and the PLL circuit) configured to poll (continuously detecting for an unlocked state) said decoder for a loss of a phase lock loop in said demodulating of said signal to detect audio file signal loss between the receiver and a transmitter (an unlocked state to be detected when the signal loss in transmission).

Sakamoto fails to disclose the signal is audio file signal.

In the same field of endeavor, Hayashi et al. disclose a receiver comprising a QPSK demodulator and a PCM decoder for demodulating an audio file signal (figure 14, 204, 205, column 1 lines 47-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Hayashi et al. into the art of Sakamoto as to process audio file signals.

Consider **claim 2 as applied to claim 1**, Sakamoto as modified by Hayashi et al. discloses wherein said processor resets and reinitializes said decoder in response to said loss in said phase lock loop such that seamless playing of audio files is maintained (figure 4, the PLL circuit 16 resets demodulator 14 via signal P2).

Consider **claim 5 as applied to claim 1**, Sakamoto as modified by Hayashi et al. discloses wherein said decoder outputs a digital audio stream (figure 4, output of PCM decoder 20).

Consider **claim 6 as applied to claim 5**, Sakamoto as modified by Hayashi et al. fail to disclose wherein said digital audio stream conforms to an I2S audio stream. However, official notice is taken that I2S is used for digital electronic devices is well

known in the art. Therefore, it would have been obvious to use I2S interface to correspond the existing digital audio stream, and output stereo.

Consider **claim 12**, see response to claim 1.

Consider **claim 13 as applied to claim 12**, see response to claim 2.

Consider **claim 16 as applied to claim 12**, see response to claim 5.

Consider **claim 17 as applied to claim 16**, see response to claim 6.

Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** as modified by **Hayashi et al. (US Patent 6075829)** in view of **Zuqert et al. (US 6466832)**.

Consider **claim 3 as applied to claim 1**, Sakamoto as modified by Hayashi et al. fail to disclose wherein said receiver comprises 900 MHz radio frequency reception circuitry.

In the related art, Zuqert et al. disclose a wireless receiver comprises 900 MHz radio frequency reception circuitry and capable of receiving CD digital audio signals (figure 7, Summary of the Invention).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Zuqert et al. into the art of Sakamoto as modified by Hayashi et al. as to include a 900 MHz radio frequency reception circuitry to receive digital audio signals wirelessly for increasing system dynamic.

Consider **claim 14 as applied to claim 12**, see response to claim 3.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** as modified by **Hayashi et al. (US Patent 6075829)** in view of **Bowles (US Patent 6389548)**.

Consider **claim 4 as applied to claim 1**, Sakamoto as modified by Hayashi et al. fail to disclose said decoder comprises an eight to fourteen modulation EFM decoder.

Such teaching is well known in the art. Bowles discloses a decoder comprises an eight to fourteen modulation EFM decoder (figure 3, EFM Demodulator 38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Bowles into the art of Sakamoto as modified as to process music audio file signals.

Consider **claim 15 as applied to claim 12**, see response to claim 4.

Claims 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** in view of **Hayashi et al. (US Patent 6075829)**.

Consider **claim 7**, Sakamoto discloses a receiver (figure 4, PLL 16, column 3 line 58-column 4 line 10, column 7 lines 18-61) performs the steps of: receiving a modulated (QPSK modulated) signal; demodulating said modulated signal (QPSK demodulation); polling (continuously detecting for an unlocked state) said demodulating for a loss in a phase lock loop in said demodulating to detect signal loss between a receiver and a transmitter (an unlocked state to be detected when the signal loss in transmission); and resetting and reinitializing said demodulating in response to said loss in said phase lock

loop such that seamless playing of signal files is maintained (figure 4, the PLL circuit 16 resets demodulator 14 via signal P2).

Sakamoto fails to disclose the signal is audio file signal.

In the same field of endeavor, Hayashi et al. disclose a receiver comprising a QPSK demodulator and a PCM decoder for demodulating an audio file signal (figure 14, 204, 205, column 1 lines 47-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Hayashi et al. into the art of Sakamoto as to process audio file signals.

Sakamoto fails to disclose a computer readable medium containing software instructions that, when executed by a processor perform the above steps. The teaching of a computer readable medium containing software instructions to be processed by a processor is well known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques into the art of Sakamoto as to make it into a program to be processed by a processor.

Consider **claim 10 as applied to claim 7**, Sakamoto as modified by Hayashi et al. discloses wherein said decoder outputs a digital audio stream (figure 4, output of PCM decoder 20).

Consider **claim 11 as applied to claim 7**, Sakamoto as modified by Hayashi et al. discloses wherein said polling is carried out by a processor (figure 4, the detection circuit and the PLL circuit).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** as modified by **Hayashi et al. (US Patent 6075829)** in view of **Bowles (US Patent 6389548)**.

Consider **claim 8 as applied to claim 7**, Sakamoto as modified by Hayashi et al. fail to disclose demodulating is a digital eight to fourteen modulation digital decoding.

Such teaching is well known in the art. Bowles discloses a decoder comprises an eight to fourteen modulation EFM decoder (figure 3, EFM Demodulator 38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Bowles into the art of Sakamoto as modified as to process music audio file signals.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sakamoto (US Patent 4940951)** as modified by **Hayashi et al. (US Patent 6075829)** in view of **Zuqert et al. (US 6466832)**.

Consider **claim 9 as applied to claim 7**, Sakamoto as modified by Hayashi et al. fail to disclose receiving is synchronized to a 900 MHz range carrier frequency modulated by said audio file signal.

In the related art, Zuqert et al. disclose receiving is synchronized to a 900 MHz range carrier frequency modulated by said audio file signal (figure 7, Summary of the Invention, column 16 lines 58-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Zuqert et al. into the art of Sakamoto as modified by Hayashi et al. as to include a 900 MHz radio frequency reception circuitry to receive digital audio signals wirelessly for increasing system dynamic.

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed**

to: Commissioner for Patents
P.O. Box 1450
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Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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RuiMeng Hu
R.H./rh
May 24, 2008

/Edward Urban/

Supervisory Patent Examiner, Art Unit 2618